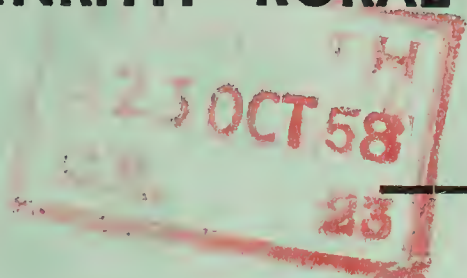


Lehman

PENRITH RURAL DISTRICT COUNCIL



ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

and

**PUBLIC HEALTH INSPECTOR
AND SURVEYOR**

FOR THE YEAR

1957



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b29985146>

MANSION HOUSE,
PENRITH,
July, 1958.

*To the Chairman and Members of the
Penrith Rural District Council.*

Mr. Chairman, Mrs. Shepherd and Gentlemen,

I herewith submit my Annual Report on the health of the community for the year 1957.

The population, as estimated by the Registrar General, was 11,500 being 20 more than in the previous year. This figure has varied very little over the past seven years.

The corrected Birth rate of 15.6 per 1,000 of the population was lower than the rates of 17.5 and 16.2 in the previous two years. Apart from a rate of 15.5 in 1954, it is the lowest figure recorded for many years.

The corrected Death rate of 11.8 was higher than the 10.5 figure for 1956 and compared with a rate of 11.5 for England and Wales.

The Infantile Mortality rate dropped to 22.9 per 1,000 live births, in comparison with the figure of 30.7 for the previous year and a rate of 23.0 for England and Wales.

Owing to a Country wide epidemic of Measles there was a marked increase in the total notifications of Infectious diseases received as compared with previous years.

A small localised outbreak of Poliomyelitis in the Ousby district with a few scattered cases in other parts of the area caused some concern during the summer of 1957. It is, therefore, encouraging to know that considerable progress has been made with Poliomyelitis Vaccination in the past year.

Again I have to report that no commencement was made on any of the Council's schemes for new sewerage works despite the urgent necessity for such work.

Details of housing progress, etc., and a very full description of the eighteen water supplies administered by the Council are given by the Surveyor within the body of this report.

I should like to thank members of the Council for their continued help and encouragement and the Staff of the Council for their valuable help and co-operation during the year.

I am, Mrs. Shepherd and Gentlemen,

Your obedient Servant,

K. J. THOMSON,

Medical Officer of Health.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area of the District (in acres)	..	..	..	181,531
Number of Inhabited Houses	..	..	..	3,663
Rateable Value	..	..	..	£89,723
Sum represented by a Penny Rate	..	..	£360	13s. 11d.
Registrar General's estimate of the population	..			11,500

Population.

The Registrar General's estimate of the population as at mid year 1957 was 11,500, being an increase of 20 over the previous year. As will be noted from the table the population of the area has fluctuated very little in the past 10 years.

Dairy farming and Agriculture continue to be the main industries of the district with Lime Works, Paper Mills and Quarries as additional sources of employment.

There was no unemployment and to my knowledge no new industry introduced during the year.

VITAL STATISTICS.

Births	Males	Females	Total	
(a) Live Births:—				
Legitimate	90	82	172	
Illegitimate	2	1	3	
	—	—	—	
	92	83	175	
	—	—	—	
Birth Rate per 1,000 of population	..			15.1
Birth Rate corrected by comparability factor	..	..	..	15.6
(b) Still Births:—				
Legitimate	1	1	2	
Illegitimate	—	—	—	
			—	
			2	
			—	
Rate per 1,000 total births (live and still)				11.3

Deaths	Males	Females	Total	
Deaths, all ages ..	73	63	136	
Death Rate per 1,000 of population ..				11.8
Death Rate corrected by comparability factor ..				11.8
Deaths from Puerperal Causes..				Nil
Maternal Mortality Rate ..				Nil
Death Rate of Infants under one year:—				
All Infants per 1,000 live births ..				22.9
There were no deaths of Illegitimate Infants.				
Deaths from:—				
Cancer				14
Measles				Nil
Whooping Cough ..				Nil
Diarrhoea (under two years of age) ..				Nil

Table showing the Vital Statistics for England and Wales and certain groups in the County of Cumberland for 1957:—

	Birth Rate	Crude Death Rate	Infantile Mortality Rate
England and Wales	16.1	11.5	23.0
Administrative County of Cumberland ..	17.9	12.1	26.4
Urban Districts of Cumberland (including Boroughs of Workington and Whitehaven)	18.8	12.2	25.8
Rural Districts of Cumberland	17.3	12.1	26.8
Rural District of Penrith (crude rate) ..	15.1	11.8	22.9
Corrected by Comparability factor ..	15.6	11.8	22.9

Infantile Mortality.

There were four deaths of Infants under one year of age, giving an Infantile Mortality rate of 22.9 per 1,000 live births compared with a rate of 30.7 in 1956. Infantile Mortality rates fluctuate very considerably from year to year when dealing with small numbers. This fact is well borne out in the table below. It will be noted that in the case of England and Wales there has been a steady and continuous fall in Infantile death rates whereas over the same period in the Penrith district the rates have varied very considerably.

The details of Infant deaths are as follows:—

1. Boy born at home and died in Hospital of Hypothermia aged 2 weeks.
2. Boy born in Hospital and died there 3 weeks later of secondary infection of Deformity of Spine.
3. Boy born in Maternity Hospital and died there 2 days later as result of Cerebral Haemorrhage due to rapid delivery.
4. Boy born in Maternity Hospital and died within 2 hours due to Prematurity.

PENRITH RURAL DISTRICT RATES, 1947-1957.

Year	Population	Death Rate	Birth Rate	Total Infantile Deaths	Infantile Mortality Rate	England & Wales Infantile Mortality Rate
1947	11,580	12.3	20.2	6	25.6	41.4
1948	11,550	11.0	17.8	9	43.7	34.0
1949	11,610	11.3	17.4	5	19.8	32.0
1950	11,450	10.0	16.6	2	11.3	29.8
1951	11,500	12.4	16.9	5	27.5	29.6
1952	11,510	10.3	19.3	8	36.0	27.6
1953	11,450	10.1	16.4	6	31.9	26.8
1954	11,490	10.8	15.5	3	17.4	25.5
1955	11,500	12.3	16.2	4	22.3	24.9
1956	11,480	10.5	17.5	6	30.7	23.8
1957	11,500	11.8	15.6	4	22.9	23.0

Maternal Mortality.

No Puerperal or Maternal death was recorded during the year, this being the fourteenth successive year without such a death.

Cancer Mortality.

According to the Registrar-General's figures there were 14 Cancer deaths in 1957 compared with 16 in 1956 and 23 in 1955. This gives a rate of 1.2 per 1,000 of the population and equals 10.3% of all deaths. This rate is about half that for England and Wales. Nevertheless, these figures may be a little misleading as on closer scrutiny of the death returns I found that 2 additional males and 1 female suffered from Cancer although this was not given as the cause of death. On the basis therefore of 17 Cancer deaths the rates would be a little higher at 1.5 per 1,000 but still below the National rate.

The average age for male Cancer deaths was 74 years while that for females was 65 years.

It will be noted that two deaths (both males) were due to Cancer of the lungs, the same as in 1956.

Location of Disease				Males	Females
Stomach	..	..	..	2	1
Rectum	..	..	..	1	—
Lungs ..	..	..	..	2	—
Prostate	..	..	..	1 (+ 2)	—
Bladder	..	..	..	1	—
Breast ..	..	..	..	—	1
Uterus ..	..	..	..	—	1
Spine ..	..	..	..	—	1
Other Sites	..	..	..	—	3 (+ 1)
Total ..				7 + 2	7 - 1

Deaths from All Causes.

The total deaths recorded in 1957 was 136 compared with 120 in 1956, giving a crude and corrected death rate of 11.8 per 1,000 of the population. The comparability factor for correction of death rate was again 1 as in previous year. This rate is higher than the rate of 10.5 in 1956 and compares with a rate of 11.5 for England and Wales.

Diseases of the Heart and Circulatory system as usual accounted for the greatest number of deaths—a total of 66 representing 48.5% of all deaths. This figure is considerably higher than the figure of 41.7% recorded in 1956.

Vascular Lesions of the Nervous System, *i.e.* Cerebral Haemorrhage and Thrombosis accounted for 22 deaths, equal to 16% of all deaths, and was practically the same as the previous year.

Deaths from Cancer totalled 14, equal to 10.3% of all deaths or 1.2 per 1,000 of the population. This figure is about half that for the Country as a whole.

Diseases of the Respiratory System, excluding Tuberculosis, accounted for 5 deaths or 3.7% of total deaths. This was less than half the figure recorded in 1956.

In view of the Influenza epidemic during the Autumn of 1957 this fall in Respiratory deaths was most surprising. Usually such epidemics give rise to an increase of Respiratory deaths.

Only one death was due to Motor Vehicle accident whereas there were 4 such deaths in 1956. In most areas motor accident deaths continue to increase.

All other Accident deaths totalled 2, one more than the previous year.

It will be noted that Suicide deaths accounted for 4 deaths, double the 1956 figure.

Causes of Death as given by the Registrar General, 1957.

	Males. Females. Total		
1. Tuberculosis (Respiratory)	-	-	-
2. Tuberculosis (Other)	-	-	-
3. Syphilitic Disease	-	-	-
4. Diphtheria	-	-	-
5. Whooping Cough	-	-	-
6. Meningococcal Infections	-	-	-
7. Acute Poliomyelitis	-	1	1
8. Measles	-	-	-
9. Other Infective and Parasitic Diseases	-	-	-
10. Malignant Neoplasm—Stomach	1	1	2
11. Malignant Neoplasm—Lung, Bronchus	2	-	2
12. Malignant Neoplasm—Breast	-	1	1
13. Malignant Neoplasm—Uterus	-	1	1
14. Other Malignant and Lymphatic Neoplasms	4	4	8
15. Leukaemia, Aleukaemia	-	-	-
16. Diabetes	-	-	-
17. Vascular Lesions of Nervous System	8	14	22
18. Coronary Disease—Angina	13	10	23
19. Hypertension with Heart Disease	1	-	1
20. Other Heart Diseases	19	18	37
21. Other Circulatory Diseases	2	3	5
22. Influenza	-	-	-
23. Pneumonia	1	-	1
24. Bronchitis	2	2	4
25. Other Diseases of Respiratory System	-	-	-
26. Ulcer of Stomach and Duodenum	3	-	3
27. Gastritis, Enteritis and Diarrhoea	-	-	-
28. Nephritis and Nephrosis	-	-	-
29. Hyperplasia of Prostate	3	-	3
30. Pregnancy, Childbirth and Abortion	-	-	-
31. Congenital Malformations	2	-	2
32. Other defined and Ill-defined Diseases	7	6	13
33. Motor Vehicle Accidents	1	-	1
34. All Other Accidents	2	-	2
35. Suicide	2	2	4
36. Homicide and Operations of War	-	-	-
All Causes	73	63	136

Age Group at Death of All Cases, 1957.

Age Group	Under 1 year	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 and over	Total
Males	4	-	1	-	1	-	2	-	-	1	1	1	3	4	7	8	17	23	73
Females	-	-	-	-	-	-	1	-	-	3	1	1	5	5	4	8	12	23	63
Total	4	-	1	-	1	-	3	-	-	4	2	2	8	9	11	16	29	46	136

NOTE:—75% of total deaths occurred in age groups of 65 years and over.

55% of total deaths occurred in age groups of 75 years and over.

GENERAL PROVISIONS OF HEALTH SERVICES IN THE AREA.

(i) Public Health Department Staff.

K. J. Thomson, M.B., Ch.B., D.P.H., L.M., Part time Medical Officer of Health.

J. A. Sedgwick, A.R.San.I., M.S.I.A., Surveyor and Chief Public Health Officer.

E. A. Burne, M.Inst.R.A., Architect and Housing Officer.

D. Wood, Assistant in Housing Department.

H. Baildon, General Assistant in Health Department.

D. W. Hammersley, General Assistant in Health Department.

Miss I. Coulston, Clerk in Public Health Department.

(ii) Laboratory Facilities.

All necessary facilities are provided by the Public Health Laboratory Service at the Cumberland Infirmary.

Dr. J. S. Faulds is the Consultant Pathologist, while Dr. D. G. Davies is in charge of all Bacteriological work.

I would again record my grateful thanks to these Consultants and their staff for the excellent co-operation and help so willingly given during the year.

(iii) Ambulance Facilities.

The County Council, as the Local Health Authority, provides and administers all Ambulance Services.

Two Ambulances are based on Penrith and one at Keswick which serves the Threlkeld area. In addition "Sitting Case" cars are available throughout the district.

(iv) Nursing in the Home.

The County Council provides all the necessary services including District Nurses, Midwives, Health Visitors and Home Helps. There were 27 Home Helps on the Register covering both Urban and Rural districts, but only six of these were for the Rural area,

Notification of Infectious Diseases—1957 in Age Groups.

Diseases.	Ages.														T	AH	D
	-1	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-	55-	65-	T			
Measles	5	24	31	30	38	130	23	3	1	1	-	-	-	286	-	-	-
Whooping Cough	3	1	1	1	3	18	-	-	-	-	-	-	-	27	-	-	-
Scarlet Fever	-	-	-	-	-	2	1	-	-	-	-	-	-	3	-	-	-
Primary or Influenzal Pneumonia	-	-	-	-	-	-	1	1	3	2	6	4	6	23	-	1	1
Dysentery	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	10
Acute Poliomyelitis P. ..	-	-	1	-	-	2	-	-	1	1	-	-	-	5	5	1	1
Acute Poliomyelitis NP. ..	-	-	-	-	-	2	-	-	1	-	-	-	-	3	-	-	-
Food Poisoning	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-
TOTALS	8	25	33	31	41	155	26	4	6	4	6	4	6	349	5	5	2

Key :—

- T - Total.
- AH - Admitted to Isolation Hospital.
- D - Deaths.
- P - Paralytic.
- NP. - Non-paralytic.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASE.

The total number of notifications received during 1957 showed a very great increase over the previous year—349, against 71—due almost entirely to an increase in Measles notifications.

There were two deaths from notifiable diseases, one from Pneumonia and one from Acute Poliomyelitis.

Measles.

A total of 286 cases was notified, the highest for many years, as against only one in 1956 and 161 in 1955.

The Measles epidemic which affected the south part of England by the end of 1956 reached the north early in January, 1957, and in Penrith Rural area reached its peak in March when 86 cases were notified. During April 73 cases occurred and thereafter the outbreak declined to 9 in August. No case was notified after October. While cases were notified from the whole district the bulk occurred in the Southwaite—Greystoke area and in the Culgaith district towards the end of the outbreak. To my knowledge no case was admitted to Hospital and there were no deaths.

Whooping Cough.

Twenty-seven cases were notified, compared with 14 in 1956 and 40 in 1955. The majority occurred in the middle months of the year.

Scarlet Fever.

Only three cases were notified—all of a mild nature. In 1956 no case occurred while six only were notified in 1955.

For a considerable number of years past this disease has become less important as a serious menace to child health. Twenty years ago practically all cases of Scarlet Fever were admitted to Hospital, where most remained for 4-6 weeks, and many were discharged home with serious and disabling after effects. To-day we don't get the cases of Scarlet Fever and it is the exception to admit a case to Hospital. Furthermore few suffer any ill effects and are back in circulation within 2-3 weeks.

This change in the pattern of Scarlet Fever is due not so much to improved methods of treatment with Penicillin and the Sulphonamide group of drugs, but to the fact that the casual organism of the disease has lost its virulence. Why this has occurred no one can say and it may be that one day this virulence will return.

Primary or Influenzal Pneumonia.

Twenty-three cases occurred, being two less than in 1956. Of the total notified, fifteen were recorded as Influenzal Pneumonia cases and all occurred during October at the height of the Influenzal epidemic. Only one death occurred from this disease and no case was admitted to Hospital.

Dysentery.

Only one case was notified, compared with nineteen in 1956. The case concerned an 11 year old girl attending a school in Penrith but living in Kirkoswald, and was due to the Sonne type of organism. Despite a very full investigation I could not find the origin of this infection. The girl was treated at home and made a rapid recovery without any spread of infection to the large family of home contacts.

Acute Poliomyelitis.

Eight cases were notified, five being of paralytic type and three non-paralytic. Five were admitted to Hospital in Carlisle and one of the three adults affected died of the disease.

The first case related to a boy of $2\frac{1}{2}$ years from Greystoke who was admitted to the Infectious Disease Ward of Cumberland Infirmary on 11th June, 1957, with suspicious signs of muscular paralysis of left leg and thigh. It was not until 20th June, 1957, that he was notified as a definite case, following on the finding of Polio Virus Type 1 in his stools. He was discharged home on 5th July, 1957, having completely recovered. No other home contact was found to be infected with the virus and the origin of his infection was never traced.

The second case occurred in an Ousby woman of 30 years of age who was admitted to Hospital on 17th July, 1957, with fairly extensive paralysis of right shoulder and some weakness of left arm. Her illness commenced about 7th July. She was eventually discharged on 10th August, 1958, still with considerable paralysis of right shoulder and continued to receive treatment at the Out Patient Department. She was also found to be infected with the Type 1 Polio Virus, as also were three of her home contacts.

One of these three, a son aged 8 years, was the third case notified. He had slept with his mother and took ill on 12th July, 1957. He was a non-paralytic case and was treated at home and recovered completely.

The fourth case was another Ousby child, aged 5 years, who took ill on 17th July, 1957, while on holiday in Scotland. He returned home and was admitted to Hospital on 19th July, 1957, as a non-paralytic case. On investigation it was found that he had been a close contact of cases number two and three already described. He made a complete recovery and was discharged from Hospital on 1st August, 1957. Neither he nor any member of his household contacts were found to be infected with the virus of Polio, although I do not think there was any doubt about the diagnosis.

The fifth case concerned a man of 29 years of age from Skelton who took ill on 20th July, 1957, with weakness of thigh and leg muscles. He had no apparent contact with any of the known cases, above described, but the Polio Virus Type 1 was recovered from his stools. He was treated at home and eventually made a full recovery.

The next two cases occurred in Stainton—the first being a little girl of 7 years whose illness commenced on 26th July, 1957, with paralysis of lower limbs. She was admitted to Hospital on 28th July, 1957, and was eventually transferred to the Ethel Hedley Hospital, Windermere, which is a long stay hospital for Orthopaedic cases. She had been in contact with children from the Ousby area and was found to be harbouring the Polio Virus Type 1.

The second of the Stainton cases, and the seventh to occur in the Penrith Rural area, related to a boy of $6\frac{1}{2}$ years of age who was a near neighbour and contact of the above

case. He took ill on 2nd August, 1957, and was treated at home as a mildly paralytic case, eventually making a full recovery. His stools were also found to be positive to the Polio Virus Type 1, although no other home contacts were found to be infected.

The eighth and last case notified, concerned a woman of 44 years of age from the Great Salkeld area. She was admitted to Hospital on 13th August, 1957, from Allonby, where she was on holiday. She was acutely ill from the beginning and died on 15th August, 1957, from respiratory paralysis.

On investigation, no contact could be found with any of the known cases in the affected areas, but it was clear that she must have been infected prior to her going on holiday.

Two contacts, her son and a playmate, were found to be infected with the Polio Virus Type 1 although both remained free of symptoms.

Although only eight cases were notified as definite cases of Poliomyelitis, in the light of past experience and also as a result of virus studies carried out by Dr. Davies, Bacteriologist, on stools from household contacts and others, it was clear that the infection was more widespread in the Rural area than indicated by actual notification.

Poliomyelitis Vaccination.

The registration and vaccination of certain age groups, commenced in 1956, continued during 1957 but the total number actually vaccinated was most disappointing due to the fact that vaccine was not available in sufficient amounts.

Registration for vaccination however showed a marked increase, reaching a figure in the region of 75% of those eligible as against less than 10% in 1956.

The position as at 31st December, 1957, is shown in the following table:—

Year Born	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	Total
Registered	15	167	155	156	171	193	144	183	194	180	187	94	93	110	78	-	2120
Vaccinated— Two Injections	-	-	-	31	48	34	21	37	47	42	45	-	-	-	-	-	305
Vaccinated— One Injection	-	-	-	2	2	5	4	6	4	4	2	-	-	-	-	-	29

At the time of writing this report (July, 1958), total registrations were 2,167 and 1,876 had completed the course of two injections.

Food Poisoning.

Only one case was notified, compared with eight in 1956. The case, a female child of 6 years, was found to be suffering from the *Salmonella Typhi-murium* organism, but despite intensive search no source of the infection was found. Fortunately no other contacts were infected.

Diphtheria.

For the thirteenth successive year no case of Diphtheria has occurred in the area, and it is now fifteen years since the last death from this disease was recorded.

During 1957 the following number of children were immunised in the Penrith Rural District:—

Primary Immunisations—all ages	..	162
Reinforcement or Booster Injections	..	243

DIPHTHERIA NOTIFICATIONS AND DEATHS, 1944—1957.

Year	ENGLAND & WALES		PENRITH RURAL DISTRICT	
	Notifications	Deaths	Notifications	Deaths
1944	23,199	934	4	—
1945	18,596	722	—	—
1946	11,986	472	—	—
1947	5,609	244	—	—
1948	3,575	156	—	—
1949	1,890	84	—	—
1950	962	49	—	—
1951	664	33	—	—
1952	376	32	—	—
1953	266	23	—	—
1954	173	9	—	—
1955	155	13	—	—
1956	51	8	—	—
1957 (Provisional)	37	6	—	—

Smallpox.

No case of Smallpox or known contact occurred in the district.

The following table gives particulars of Smallpox vaccinations carried out during 1957:—

Age at Vaccination	-1	1	2-4	5-14	Over 15	Total
Primary	90	—	4	2	—	96
Re-vaccination ..	—	—	—	1	14	15

These figures are a little better than the previous year but are still well below what they should be.

TUBERCULOSIS.

The following table gives particulars of new cases added to the Register during 1957:—

AGE.	NEW CASES.				DEATHS.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
1—4 years ..	—	—	—	—	—	—	—	—
5—14 years ..	—	—	—	—	—	—	—	—
15—24 years ..	—	2	—	—	—	—	—	—
25—34 years ..	1	—	—	—	—	—	—	—
35—44 years ..	1	1	—	—	—	—	—	—
45—54 years ..	—	1	—	—	—	—	—	—
55—64 years ..	—	—	—	—	—	—	—	—
65 and upwards	2	1	—	—	—	—	—	—
TOTALS ..	4	5	—	—	—	—	—	—

Of the nine added to the Register, four related to inward transfer cases, *i.e.* cases previously notified elsewhere but who had moved into the Rural Area. During the year six names were removed from the Register—three having left the district, two having died of causes other than Tuberculosis, and one having recovered. There was no recorded death from any form of Tuberculosis.

The following table gives the number of cases on the Tuberculosis Register at December, 1957:—

			Males	Females	Total
Pulmonary	..	..	29	26	55
Non-pulmonary	..	..	4	9	13
			—	—	—
	Totals	..	33	35	68
			—	—	—

Prevention of Tuberculosis.

The Mobile Mass Radiography Unit paid its usual visits to Langwathby and Lazonby during March when 328 of the general Public attended for X-ray. No new cases were discovered but eight non-tuberculous conditions were referred for further investigation. In addition 2,628 of the public attended the Sessions held in Penrith and many of this number would undoubtedly reside in the Rural Area. Five active cases of Tuberculosis were found in this group as well as over 100 other conditions.

The number of people who took advantage of this free service showed a slight increase over 1956 figures. I would again stress how important it is for all adults—young and old alike—to have an X-ray taken every year when the Unit is operating in their district.

B.C.G. Vaccination.

The B.C.G. Vaccination of the 13-14 year old age group of School Children was continued during the year, and the following two tables show the work done in the Penrith Rural Schools:—

**Scheme of B.C.G. Vaccination for 13/14 Year Age Group (1943). Mass Miniature Radiography.
Penrith Rural Area, up to and including December 31st, 1957.**

Sanitary District School	Total number of children in 1943 age group as shown on Nominal Roll	Total number of children in 1943 age group who had M.M.R. Report	Total number of consents given for B.C.G. Vaccination	Total number of children in 1943 age group with satisfactory M.M.R. Report	Total number of children in 1943 age group with unsatisfactory M.M.R. Report and recalled for Large Film.	Satisfactory	Unsatisfactory
Penrith Rural District							
Hutton Roof	-	-	-	-	-	-	-
Matterdale	1	-	-	-	-	-	-
Mungrisdale	2	-	-	-	-	-	-
Greystoke	7	6	7	6	-	-	-
Newbiggin	-	-	-	-	-	-	-
Penruddock	11	-	6	-	-	-	-
Stainton	5	4	5	4	-	-	-
Hutton Marr	7	7	6	7	-	-	-
Lazonby	30	28	21	28	-	-	-
Langwathby	2	2	1	2	-	-	-
Culgaith	7	6	4	6	-	-	-
Calthwaite	5	4	4	4	-	-	-
High Hesketh	4	4	3	4	-	-	-
Ivegill	1	1	1	1	-	-	-
Total	82	62 (75.7%)	58 (70.7%)	62 (75.7%)	-	-	-

**Results of Mantoux Testing and B.C.G. Vaccination for Children in 13/14 Year Age Group
(1943) in Penrith Area, up to and including 31st December, 1957.**

Sanitary District School	Number of children Mantoux tested	Number absent after first Mantoux test	Number found to be Mantoux Positive	Number found to be Mantoux Negative	Number given B.C.G. Vaccination
Penrith Rural District					
Hutton Roof ..	—	—	—	—	—
Matterdale ..	—	—	—	—	—
Mungrisdale ..	—	—	—	—	—
Greystoke ..	7	—	—	7	7
Newbiggin ..	—	—	—	—	—
Penruddock ..	6	—	1	5	5
Stainton ..	5	—	2	3	3
Hutton Marr ..	6	—	1	5	5
Lazonby ..	21	—	1	20	20
Langwathby ..	1	—	—	1	1
Culgaith ..	4	—	—	4	4
Calthwaite ..	4	—	—	4	4
High Hesketh ..	3	—	3	—	—
Ivegill ..	1	—	—	1	1
Total ..	58	—	8 (13.8%)	50 (86.2%)	50 (86.2%)

NATIONAL ASSISTANCE ACT, 1948.

NATIONAL ASSISTANCE (AMENDMENT) ACT, 1951.

No action was necessary under Section 47 of above Act. During the year, however, four elderly people were reported to me as in possible need of care and attention. All were visited and were subsequently removed to appropriate Hospital or Home.

SANITARY CIRCUMSTANCES OF THE AREA.

I am obliged to Mr. J. A. SEDGWICK, Surveyor and Public Health Inspector, for the following report:—

Sir,

I have pleasure in presenting my Annual Report for 1957 as follows:—

Water Supplies.

The Council's sources of water supply are precisely the same as in the preceding year, comprising four major sources, and fourteen smaller supplies (mainly village supplies) as under:—

1. AIRA BECK SUPPLY.

This is the largest source of supply in the Penrith Rural Area. Raw water is obtained from an intake on the Aira Beck, above Dowthwaite Head, at a height of some 1,500 feet above Ordnance Datum. This water flows to the Crook-wath Filtration Works where purification treatment takes place. The purification plant consists of four Paterson type pressure filters, each filter being capable of dealing with up to 125,000 gallons per day. Chemical apparatus exists for the addition of lime and alumina to assist in the process of filtration, and it is also necessary to add lime after filtration because of the exceeding softness of the water, and of the suspicion that at times it might be slightly plumbo-solvent.

From the filtration works water flows into Berrier Reservoir (top water level 1,150 feet O.D. capacity 50,000

gallons), High Larches Reservoir (top water level 1116 feet O.D. capacity 50,000 gallons), Hewer Hill Reservoir (top water level 860 feet O.D. capacity 500,000 gallons), and finally into Brownrigg Reservoir (top water level 748 feet O.D. capacity 90,000 gallons).

The Aira Beck supply has a minimum dry weather flow of 450,000 gallons per day, and the average daily demand is in the region of 335,000 gallons. This supply is capable of delivering water into the Parishes of Castlesowerby, Catterlen, Dacre, Great Salkeld, Greystoke, Hesket, Hutton, Lazonby, Matterdale, Mungrisdale, Skelton and Threlkeld.

2. BULLFELL (Mungrisdale) SUPPLY.

Water for this supply is obtained from a number of springs on Bull Fell, above Mungrisdale, and collected in a screening chamber at an altitude of 1,200 feet above Ordnance Datum. This is water of exceptional purity, and, apart from simple screening, no treatment whatsoever is necessary. This supply is closely linked with the Aira Beck Supply, and water can be delivered into Berrier, High Larches and Hewer Hill Reservoirs, although in practice it only feeds into High Larches Reservoir. The normal yield of these springs is 210,000 gallons per day, but a short spell of dry weather materially affects the flow, and in July of this year, a new low minimum yield of 97,500 gallons per day was recorded. The average daily demand for water is some 180,000 gallons per day, leaving in a dry period 80,000 gallons per day short, which has to be acquired from the Aira Beck Supply. This supply can deliver water into the Parishes of Castlesowerby, Greystoke, Hutton, Mungrisdale, Skelton and Threlkeld.

3. CLINT (Hesket) SUPPLY.

For this supply water is obtained from a number of springs at an altitude of 1,144 feet above O.D. above Scalehouses, Renwick. This water is delivered into Ruckcroft Reservoir (top water level 739 feet O.D. capacity 50,000 gallons), and from there supplies a portion of the large parish of Hesket. The rising main feeding Ruckcroft reservoir is only capable of delivering 60,000 gallons per day, and, unfortunately, Clint Springs are seriously affected by dry weather

conditions. It is not unusual for the flow into Ruckcroft reservoir to diminish to 26,000 gallons per day. At such times, serious shortages take place in the high lying parts of the Parish, particularly at High Hesket and Longdales. Temporary relief can be given to these dry areas, by augmenting the Hesket supply from Hewer Hill Reservoir, and this again has serious results on supplies in other parts of the area. Briefly, the water level in Hewer Hill Reservoir drops and High Larches Reservoir receives a depleted supply because of additional water delivered into Hewer Hill Reservoir. Finally, High Larches Reservoir becomes empty (because at the same time the yield at Bullfell is decreasing) and an increasing portion of the western side of the area suffers ever increasing intermittency of supplies. In order to remedy the position the Council have decided to augment the supply into Ruckcroft Reservoir by pumping from Dale Springs, where up to an additional 120,000 gallons per day can be obtained. If this scheme can be approved and carried out, the benefit will not only be apparent in the Hesket area but over most of the area served by High Larches and Hewer Hill Reservoirs.

4. GAMBLESBY SUPPLY.

Water for this supply is obtained from Springs on Gamblesby Fell at an altitude of 950 feet and 770 feet above Ordnance Datum respectively, with augmentation by means of a spring intake. Water is delivered into a reservoir at Gamblesby (top water level 730 feet O.D. capacity 2,000 gallons), and supplies the Parishes of Glassonby, Hunsonby, Langwathby and Ousby.

5. AINSTABLE SUPPLY.

Ainstable obtains water from Harras Springs at an altitude of 550 O.D. flowing direct into a reservoir there of a capacity of 2,500 gallons, top water level 545 feet O.D. This is a supply that fluctuates from some 10,000 gallons per day in wet weather to a complete dry-up in summer. The minimum dry weather flow was regarded as 7,000 gallons per day, but of recent years a considerable quantity of water is escaping at a lower level than the spring intake, and is of no use to the reservoir. It is necessary to augment the Ainstable Supply from the Hesket (Clint) supply. This supply is restricted to the village of Ainstable only.

6. CROGLIN SUPPLY.

A spring at an altitude of 933 feet above O.D. supplies water to a reservoir of 900 gallon capacity at Croglin, top water level 710 feet O.D. The minimum dry weather flow here is some 11,000 gallons per day, which is capable of meeting the demand. In order to enlarge the distribution area it is proposed to construct a reservoir of 5,000 gallons at an altitude of 834 feet above O.D. and this work will be put in hand this coming year.

7. NEWBIGGIN (Croglin) SUPPLY.

A Spring on Croglin Fell at an altitude of 750 feet O.D. delivers water into a reservoir of 3,500 gallons capacity, with a top water level of 740 feet O.D. This supply has a minimum dry weather flow of 12,000 gallons per day which is quite adequate for any demands that are made on it.

8. RENWICK SUPPLY.

Springs at an altitude of 920 feet O.D. on Renwick Fell supply water to a reservoir of 3,600 gallons capacity, with a top water level of 825 feet O.D. The minimum dry weather flow of these springs is 7,000 gallons per day, which at times, is inadequate for the needs of the supply area.

9. LAZONBY SUPPLY.

Springs at Wadygill, near Scalehouses, Renwick, at an altitude of 826 feet O.D. with a minimum dry weather flow of 34,000 gallons deliver water into Rigg Head Reservoir, capacity 30,000 gallons, top water level 549 feet O.D. and supply Blunderfield, Highbankhill and part of Kirkoswald en route. This supply is quite adequate for the demands made upon it.

10. OUSBY SUPPLY.

Two springs on Ousby Fell at altitudes of 1,100 and 950 feet above Ordnance Datum supply water into Ousby Reservoir, capacity 3,000 gallons, top water level 925 feet O.D. This supply is adequate for the needs of Ousby and also augments the Skirwith supply. The minimum dry weather flow is 23,600 gallons.

11. SKIRWITH SUPPLY.

A spring on Ousby Fell at an altitude of 970 feet O.D. supplies water into Skirwith Reservoir, capacity 4,800 gallons, top water level 700 feet O.D. The minimum dry weather flow of this spring is 10,000 gallons per day. This is inadequate and the supply has to be augmented from the Ousby Supply.

12. CULGAITH SUPPLY.

The Culgaith supply is obtained from springs at Ranbeck, at an altitude of 1,150 feet O.D. with a minimum dry weather flow of 15,500 gallons. The supply is also augmented by springs and a stream intake at Kirkland, at 870 O.D. providing a further 10,000 gallons per day. This supply is adequate for the normal demands of the area.

13. KIRKOSWALD SUPPLY.

A portion of the village of Kirkoswald is supplied from a spring at Kirkoswald at an altitude of 380 feet above O.D. with a minimum dry weather flow of 5,500 gallons per day, delivering into a reservoir of a capacity of 5,000 gallons, top water level 343 feet O.D.

14. THRELKELD SUPPLY.

Two springs at Threlkeld at altitudes of 1,100 and 930 feet above O.D. with a joint minimum dry weather flow of 38,000 gallons, deliver water to a reservoir, capacity 7,750 gallons, top water level 620 feet O.D. This supply is adequate for the village of Threlkeld.

15. GREAT SALKELD SUPPLY.

A Spring at Cold Keld at 520 feet O.D. with a minimum dry weather flow of 8,000 gallons, delivering into a reservoir of 8,500 gallons capacity at 490 feet O.D. exists. This supply is not now normally used, the area being fed from Brownrigg Reservoir, from the Aira Beck Supply (No. 1).

16. LANGWATHBY SUPPLY.

A spring on Langwathby Moor at 380 feet O.D., minimum dry weather flow of 29,000 gallons, is available as an emergency supply for Langwathby, which normally is supplied from the Gamblesby Scheme (No. 4).

17. EDENHALL SUPPLY.

Springs at 380 feet O.D. and a ram supply from an open reservoir in Edenhall Park, minimum dry weather flow 8,000 gallons, supply water into Edenhall Reservoir, capacity 30,000 gallons, top water level 370 feet O.D. Normally Edenhall is supplied from the Aira Beck Supply (No. 1).

18. DACRE SUPPLY.

A spring on Dacre Banks at an altitude of 710 feet O.D. delivers water into a reservoir of 1,500 gallons capacity with a top water level of 700 feet O.D. This supply is only used in times of extreme emergency, the normal supply being obtained from the Aira Beck Supply (No. 1).

General.

The average daily demand for water throughout the area is calculated at 750,000 gallons per day, a very large proportion of which is required for the agricultural industry, which is predominantly dairying in character. This sets up a twice daily peak demand for water for cooling purposes, and, at these times, because of the small diameter of the distribution mains together with generally inadequate storage capacity, intermittency of supplies is prevalent in the high lying parts of the area. Practically all farms in the area have a metered supply of water, and this is most effective in the prevention of avoidable wastage. In addition, farmers are also constantly advised to make arrangements so that water used for milk cooling purposes can be utilised a second time.

I also advise consumers, where electricity is available, to provide reffridgerated cooling plants for milk. These plants are much more effective than the ordinary water cooled units, and do result in a considerable saving of water.

A study of the following detailed table will show that the majority of houses in the Penrith Rural Area enjoy the benefits of a piped supply of water from the Council's supplies. In nearly all the other cases, water of reasonably good quality is obtainable from private springs, and estate supplies.

Out of a total of 3,663 occupied houses, 3,324 are in receipt of a piped supply of water as follows:—

Parish	Population	No of Inhabited Houses	No of Houses Supplied from Public Main		Population Supplied		Agricultural-Meters Fixed
			Direct	Standpipe	Direct	Standpipe	
Ainstable ..	488	156	137	2	433	5	26
Castle Sowerby	409	107	104	—	401	—	54
Catterlen ..	225	97	97	—	225	—	15
Culgaith ..	664	218	218	—	664	—	27
Dacre ..	935	314	304	—	905	—	53
Glassonby ..	320	98	91	—	296	—	24
Gt. Salkeld	366	121	116	—	346	—	17
Greystoke	505	166	163	—	493	—	23
Hesket ..	2065	616	583	—	1982	—	132
Hunsonby ..	368	135	134	—	365	—	26
Hutton ..	306	96	89	—	286	—	22
Kirkoswald	777	272	200	1	570	3	29
Langwathby	572	187	179	—	556	—	20
Lazonby ..	645	220	213	—	625	—	20
Matterdale	586	192	95	—	305	—	22
Mungrisdale	368	102	81	—	301	—	34
Ousby ..	356	115	108	—	335	—	18
Skelton ..	985	272	265	—	965	—	93
Threlkeld ..	560	179	147	—	482	—	1
Total	11500	3663	3324	3	10535	8	656

Waste Water Detection.

Owing to the fact that the demand for water in this area is in many places only short of the maximum carrying capacity of the distribution mains, the slightest avoidable wastage has an immediate adverse effect on the maintenance of supplies, and, consequently, it is essential to maintain waste water detection at a very high level. Regular inspections and tests are made throughout the whole area, and, particularly after period of frosty weather. Notwithstanding regular advertisements in the local press advising consumers to shut down supplies to troughs that are not in use, each thaw produces a considerable number of troughs in a defective condition, and it is imperative that such wastage be prevented without delay.

During the year one farmer was successfully prosecuted for allowing three troughs to be in such defective conditions that serious wastage was taking place. It is hoped that the action taken by the Council will have a deterrent effect on other careless consumers in the future.

Sewerage.

None of the Council's major schemes for providing new sewerage works in the area have made any great progress, although it would appear that there are now no major obstacles in the path of the combined scheme for High Hesket and Low Hesket. It is hoped that this scheme will be ready to go for tender soon.

With this scheme out of the way it is intended to press forward with the scheme for Skelton, involving the laying down of new sewers for the village, together with a modern treatment plant.

Unsatisfactory plants also exist at Skirwith, Lazonby, Kirkoswald, Armathwaite, Motherby and Penruddock, and it will therefore be realised that the Council have a tremendous programme ahead of them in so far as the modernisation of their sewage works is concerned.

Refuse Collection.

Refuse is collected throughout the area once per fortnight, and conveyed to the Council's refuse dumps, situated at Culgaith, Lowthian Ghyll (Low Hesket), Coombs Wood (Armathwaite), Ellonby, Threlkeld, and Bunkers Hill (Greystoke).

This service is carried out by means of a CK 3 Karrier refuse disposal vehicle, manned by a driver and two loaders. Having regard to the very scattered nature of most of the area covered, the Council can be reasonably satisfied with the manner in which refuse is collected in the area.

All refuse tips are regularly inspected, and, where any of these places are found to be rat infested, immediate steps are taken to deal with the problem.

The Council also co-operate with the County Council in removal of litter from refuse baskets provided by the County Council on the various lay-bys in the area. Litter on lay-bys

presents a serious problem, particularly during the holiday season, and at the moment, consultations are taking place regarding the provision of more litter bins, and of an improved design to prevent birds scattering the deposited litter over the countryside, and also to encourage travellers to use the bins provided for their refuse.

Schools.

Visits of inspection are regularly made to all schools in the area, in connection with the provision of adequate sanitary accommodation and washing facilities.

Factories Act, 1937.

There are fifty-eight factories registered in the area, and all of these are periodically inspected to ensure compliance with the Regulations.

Food and Drugs Act, 1938.

Regular inspections are made to all food premises and shops in the area, and advice and instruction given to all handlers of food so that a proper standard of hygiene is maintained, and that the provisions of the Food Hygiene Regulations, 1955, are observed. In all cases shop keepers and other people concerned are most anxious to do all they can in this respect, and they willingly co-operate with this department in all matters.

Amongst various items of foodstuffs condemned as unfit for human consumption were the following:—

4 tins Stewed Steak.	5 tins Corned Beef.
1 tin Ox Tongue.	27 tins various Soups.
7 tins Chopped Tongue.	17 tins Chocolate Spread.
9 tins Chopped Ham.	20 tins Peas.
4 tins Beef Loaf.	1 tin Frozen Albumen.
1 tin Pork Luncheon Meat.	31 tins various Fruits.
1 tin Pork Shoulder.	10 tins. Evaporated Milk.
3 tins Lamb Tongue.	80 lbs. Cheese.

Slaughterhouses.

In the Penrith Rural Area there are five licensed slaughterhouses, all of which are in use. These are all in the occupation

of local butchers, and are situated in widely different parts of the area. Speaking generally, the kill at these places is strictly confined to very local consumption, and no slaughtering takes place for meat to be despatched to any other area. Under these circumstances it will be appreciated that the meat killed is of the very highest quality, and once again I have to report that no evidence of any tubercular infection has been discovered.

The number of animals passing through these slaughterhouses has declined slightly since slaughtering was resumed in July, 1954. This is due to the fact that there is a tendency on the part of the smaller butchers, when buying cattle in the Penrith Auction Mart, to have them slaughtered at the Penrith Abattoir, thus saving the cost of live transport, and subsequent slaughter at home.

There was a serious outbreak of Foot and Mouth Disease in the area, in the latter part of the year, and, as a consequence of this, killing was suspended in four of the slaughterhouses for a period of nearly two months.

During the year the following animals passed through the slaughterhouses, inspection of carcasses involving a total of 363 visits as under:—

Particulars	Cattle except Cows	Cows	Sheep and Lambs	Pigs	Calves	Horses
Number killed	311	64	1245	432	2	Nil
All Diseases other than T.B.						
Whole carcasses condemned	—	—	5	1	2	Nil
Carcasses of which some part or organ was condemned	34	28	44	3	—	Nil
Percentage of the number killed affected with disease other than Tuberculosis..	10.9	43.7	3.5	1	10.0	Nil
Tuberculosis						
Whole carcasses condemned	—	—	—	—	—	Nil
Carcasses of which some part or organ was affected ..	—	—	—	—	—	Nil
Percentage of the number killed affected with T.B.	—	—	—	—	—	Nil
Cysticercus bovis	—	—	—	—	—	Nil

Disinfection and Disinfestation.

Following upon the notification of infectious diseases, terminal disinfection is carried out where necessary, although little of such work has been necessary in view of the low incidence of infectious disease in the area.

It has also been necessary to deal with one case of a filthy and verminous house, where thorough disinfection and disinfestation was carried out.

Ice Cream.

There is only one producer of ice cream in the area, and his premises and equipment are regularly inspected, and samples of his products taken. In addition, various pre-packed proprietary brands of ice cream sold in the area were sampled with satisfactory results.

I am indebted to Mr. E. A. BURNE, Architect and Housing Officer, for the following report on housing matters:—

The Council during the year have in their Housing programme completed the following:—

Lazonby	..	..	7 Houses
Armathwaite	..	..	4 Houses
Highbankhill	..	..	2 Houses

Tenders were invited and accepted for a further 12 houses at Threlkeld. These are being built to replace existing timber hutments to be demolished under a Clearance Order.

The Council have curtailed their building programme owing to the high rate of interest on loan charges, but this is to be brought under review again early in 1958.

The total number of Council houses now occupied in the Rural District up to the end of 1957 is shown in the following table:—

Newton Reigny ..	4	Pallet Hill	2
Ivegill	4	Catterlen	8
Dockray	2	Skirwith	8
Langwathby ..	18	Glassonby	4
Lazonby	23	Renwick	4
Blencarn	4	Aldby	2
Culgaith	22	Low Plains	4
Hunsonby	19	Armathwaite ..	8
Newbiggin	16	Mellguards	2
Stainton	22	Skelton	6
Low Hesket ..	12	Aikbank	4
Calthwaite ..	11	Melmerby	6
Edenhall	4	Threlkeld	24
Greystoke	22	Little Salkeld ..	16
Great Salkeld ..	4	Gamblesby	4
Howes	2	Kirkland	2
Ousby	6	Kirkoswald	28
Salkeld Dykes ..	4	Thiefside	4
Blencowe	4	Clickhem	4
Plumpton	15	Southwaite	2
Dacre	4	Hutton End	2
Penruddock ..	2	Lazonby	
Hutton End ..	2	(Eden Square) ..	7
Sowerby Row ..	2		
Ainstable	8	Total	389
Low Braithwaite ..	2		

In addition the Council also purchased a derelict house at Kirkoswald, and after obtaining a Ministry grant, made a conversion to provide two small Flats.

Building under private enterprise made good progress during the year. A total of 15 houses was completed up to the end of the year and 14 are under construction, bringing the total completed since the war to 100.

Housing Act, 1949.

The modernization of sub-standard houses and the conversion of other buildings into dwelling houses with the aid of improvement grants paid by the Council to owners and certain lease-holders continued to make steady progress.

During the year a total of 37 applications were received in respect of 45 houses, including the conversion of other property into two dwelling houses. One application was disapproved and two others subsequently cancelled.

Since the inception of the Act a total of 154 applications involving improvements to 187 dwellings have been dealt with by the Council, 13 of which were either disapproved or cancelled, and at the end of the year 110 schemes had been satisfactorily completed and provided 140 Grade 1 houses.

In addition to the above, quite a number of enquiries and preliminary applications have been received and property inspected.

In the majority of these cases, however, it was found that the houses were so far below standard that the cost of renovation would be so prohibitive that no further action was taken by the applicants. In the remainder, the owners did not think it worth while to carry out all the improvements required to comply with the conditions laid down in the Act.

SANITARY INSPECTIONS OF THE AREA.

Summary of Inspections Made.

Workshops	..	..	..	..	..	..	..	39
Petrol Stores	..	..	..	..	..	..	..	53
Carbide Stores	..	..	..	..	..	..	..	3
Works in progress	..	..	..	..	..	..	..	376
New Buildings	..	..	..	..	..	..	..	318
General Inspections	..	..	..	..	..	..	..	462
Inspections re complaints received				..	..	..	..	86
Inspections under Housing Acts	..	..	..	..	..	..	..	347
Inspections of Schools	..	..	..	..	..	..	..	28
Slaughterhouses	..	..	..	..	..	..	..	363

Works Carried Out.

Premises cleansed	..	..	..	..	..	..	..	1
Roofs repaired	..	..	..	..	..	..	..	24
New Spouting fixed	..	..	..	..	..	..	..	22
Air drains fixed	..	..	..	..	..	..	..	8
Floor relaid, etc.	..	..	..	..	..	..	..	52
Walls repaired	..	..	..	..	..	..	..	36
Scullery sinks trapped	..	..	..	..	..	..	..	27
Water closets constructed	..	..	..	..	..	..	..	64
Sewers and Drains extended	..	..	..	..	..	..	..	83
New Septic Tanks built	..	..	..	..	..	..	..	37
Water Supplies carried to houses	..	..	..	..	..	..	..	29
New Baths fixed	..	..	..	..	..	..	..	66
New Houses completed	..	..	..	..	..	..	..	28
Houses altered or repaired	..	..	..	..	..	..	..	88
New Windows fixed	..	..	..	..	..	..	..	94
New Ceilings put up or repaired	..	..	..	..	..	..	..	63
New Sinks fitted to houses	..	..	..	..	..	..	..	102
Obstructed Drains cleansed	..	..	..	..	..	..	..	37
Drains tested	..	..	..	..	..	..	..	107

Yours faithfully,

J. A. SEDGWICK,
Surveyor and Public Health Inspector.

